

METHODS AND APPARATUS FOR MANUFACTURING FIBER-CEMENT SOFFITS WITH AIR VENTS

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for producing fiber-cement soffit building products. In one embodiment of the invention, an apparatus for producing fiber-cement soffits includes a punch assembly, a support assembly facing at least a portion of the punch assembly, and an actuator operatively coupled to at least one of the punch assembly or the support assembly. The punch assembly can include a punch plate and a plurality of punches coupled to the punch plate. Each punch can have a length and a first cross-sectional dimension generally normal to the length. The support assembly can have a support plate, and at least a portion of the support plate is juxtaposed to at least a portion of the punch plate. The support plate can include a plurality of holes arranged in a pattern so that each hole in the portion of the support plate juxtaposed to the punch plate is aligned with a corresponding punch on the punch plate. Each hole can have a second cross-sectional dimension greater than the first cross-sectional dimension of the punches to define a radial punch/hole clearance between each punch and each hole. The radial punch/hole clearance, for example, is generally greater than that of metal punch presses to allow the punches to be removed from a fiber-cement panel without delaminating portions of the panel.